

55467-16

9/10/2014

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**U.S. ENVIRONMENTAL PROTECTION AGENCY**

Office of Chemical Safety and Pollution Prevention  
Office of Pesticide Programs  
Registration Division (7504P)  
1200 Pennsylvania Ave., N.W.  
Washington, DC 20460

EPA Reg. Number:

**55467-16**

Date of Issuance:

**SEP 10 2014**

Term of Issuance:

Unconditional

Name of Pesticide Product:

**Tenkoz Ethephon 6  
PGR**

**NOTICE OF PESTICIDE:**

- Registration
  - Registration Review
- Under FIFRA, as amended

Name and Address of Registrant (include ZIP Code):

Mailed to:

Robert Ridsdale; Agent for Tenkoz, Inc.  
1725 Windward Concourse, Ste 410  
Alpharetta, GA 30005-1784

**Note:** Changes in labeling differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Registration Division prior to use of the label in commerce. In any correspondence on this product always refer to the above EPA registration number.

On the basis of information furnished by the registrant, the above named pesticide is hereby registered under the Federal Insecticide, Fungicide and Rodenticide Act. Registration is in no way to be construed as an endorsement or recommendation of this product by the Agency. In order to protect health and the environment, the Administrator, on his motion, may at any time suspend or cancel the registration of a pesticide in accordance with the Act. The acceptance of any name in connection with the registration of a product under this Act is not to be construed as giving the registrant a right to exclusive use of the name or to its use if it has been covered by others.

This product is registered in accordance with FIFRA section 3(c)(5) provided that you:

1. Submit and/or cite all data required for registration of your product under FIFRA sec 3(c)(5) when the Agency requires all registrants of similar products to submit such data; and submit acceptable responses required for reregistration / registration review of your product under FIFRA section 4.

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Signature of Approving Official:

Tony Kish, Product Manager (22)  
Fungicide Branch/Registration Division/OPP/OCSP (7504P)

Date:

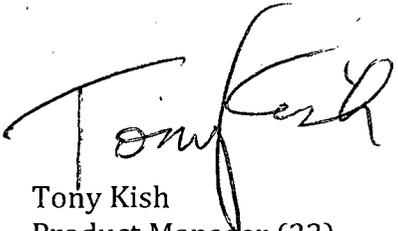
**SEP 10 2014**

- 2. Submit one copy of the revised final printed label for the record before the product is released for shipment.

If these requirements are not complied with, the registration will be subject to cancellation in accordance with FIFRA sec. 6(e). Your release for shipment of the product constitutes acceptance of these conditions.

The basic Confidential Statement of Formula (CSF) dated 04/28/2014 for the product referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide and Rodenticide Act is acceptable. This basic CSF will be added to the file for this product.

A copy of the label stamped "Accepted" is enclosed for your records.



Tony Kish  
Product Manager (22)  
Fungicide Branch  
Registration Division (7504P)

Enclosure:  
Label stamped "Accepted"



# PRECAUTIONARY STATEMENTS

## DANGER

### HAZARDS TO HUMANS AND DOMESTIC ANIMALS

**CORROSIVE.** Causes irreversible eye damage and skin burns. Harmful if swallowed or absorbed through skin. Do not get in eyes, on skin or on clothing.

### PERSONAL PROTECTIVE EQUIPMENT (PPE)

Applicators and other handlers must wear coveralls over short-sleeved shirts and short pants, chemical resistant gloves made of any waterproof material (such as Nitrile, Butyl, Neoprene and/or Barrier Laminate), chemical-resistant footwear plus socks, protective eyewear, chemical-resistant headgear for overhead exposure and chemical-resistant apron when cleaning equipment or mixing and loading.

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this products concentrate. Do not reuse them. Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240 (d) (4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

### User Safety Recommendations

Users should wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.

Users should remove clothing immediately if pesticide gets inside. Then wash body thoroughly and put on clean clothing.

Users should remove PPE immediately after handling this product. As soon as possible, wash thoroughly and change into clean clothing. Wash the outside of gloves before removing.

### ENVIRONMENTAL HAZARDS

Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark.

Do not contaminate water when disposing of equipment washwaters.

Do not contaminate water used for irrigation or domestic purposes.

### SPRAY DRIFT

Avoid spray drift. Do not apply when weather conditions may cause drift. Do not allow this product to drift on to non-target areas. Drift may result in illegal residues or injury to adjacent crops and vegetation, in the form of leaf yellowing and defoliation. To avoid spray drift, DO NOT apply aerially when wind speed is greater than 10 mph or during periods of temperature inversions. Use of larger droplet size will also reduce spray drift.

#### AVOIDING SPRAY DRIFT AT THE APPLICATION SITE IS THE RESPONSIBILITY OF THE APPLICATOR.

The interaction of many equipment-and-weather-related factors determine the potential for spray drift. The applicator is responsible for considering all these factors when making decisions.

The following drift management requirements must be followed to avoid off-target movement from aerial applications to agricultural field crops. These requirements do not apply to forestry applications, public health uses or to applications using dry formulations.

1. The distance of the outer most nozzles on the boom must not exceed 3/4 the length of the wingspan or rotor.
2. Nozzles must always point backward parallel with the air stream and never be pointed downwards more than 45 degrees.

Where states have more stringent regulations, they should be observed.

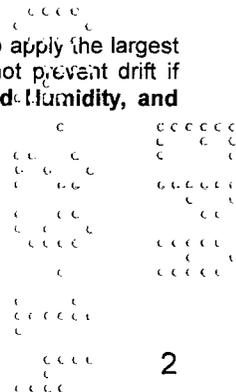
The applicator should be familiar with and take into account the information covered in the Aerial Drift Reduction Advisory below:

### AERIAL DRIFT REDUCTION ADVISORY

[This section is advisory in nature and does not supersede the mandatory label requirements].

#### INFORMATION ON DROPLET SIZE

The most effective way to reduce drift potential is to apply large droplets. The best drift management strategy is to apply the largest droplets that provide sufficient coverage and control. Applying larger droplets reduces drift potential, but will not prevent drift if applications are made improperly, or under unfavorable environmental conditions (See Wind, Temperature and Humidity, and Temperature Inversions).



**CONTROLLING DROPLET SIZE**

**Volume** - Use high flow rate nozzles to apply the highest practical spray volume. Nozzles with higher rated flows produce larger droplets.

**Pressure** - Do not exceed the nozzle manufacturer's recommended pressures. For many nozzle types lower pressure produces larger droplets. When higher flow rates are needed, use higher flow rate nozzles instead of increasing pressure.

**Number of nozzles** - Use the minimum number of nozzles that provide uniform coverage.

**Nozzle Orientation** - Orienting nozzles so that the spray is released parallel to the airstream produces larger droplets than other orientations and is the recommended practice. Significant deflection from horizontal will reduce droplet size and increase drift potential.

**Nozzle Type** - Use a nozzle type that is designed for the intended application. With most nozzle types, narrower spray angles produce larger droplets. Consider using low-drift nozzles. Solid stream nozzles oriented straight back produce the largest droplets and the lowest drift.

**BOOM LENGTH**

For some use patterns, reducing the effective boom length to less than 3/4 of the wingspan or rotor length may further reduce drift without reducing swath width.

**APPLICATION HEIGHT**

Applications should not be made at a height greater than 10 feet above the top of the target plants unless a greater height is required for aircraft safety. Making applications at the lowest height that is safe reduces exposure of droplets to evaporation and wind.

**SWATH ADJUSTMENT**

When applications are made with a crosswind, the swath will be displaced downwind. Therefore, on the up and downwind edges of the field, the applicator should compensate for this displacement by adjusting the path of the aircraft upwind. Swath adjustment distance should increase, with increasing drift potential (higher wind, smaller drops, etc.).

**WIND**

Drift potential is lowest between wind speeds of 2 - 10 mph. However, many factors, including droplet size and equipment type determine drift potential at any given speed. Application should be avoided below 2 mph due to variable wind direction and high inversion potential. NOTE: Local terrain can influence wind patterns. Every applicator should be familiar with local wind patterns and how they affect spray drift.

**TEMPERATURE AND HUMIDITY**

When making applications in low relative humidity, set up equipment to produce larger droplets to compensate for evaporation. Droplet evaporation is most severe when conditions are both hot and dry.

**TEMPERATURE INVERSIONS**

Applications should not occur during a temperature inversion because drift potential is high. Temperature inversions restrict vertical air mixing, which causes small suspended droplets to remain in a concentrated cloud. This cloud can move in unpredictable directions due to the light variable winds common during inversions. Temperature inversions are characterized by increasing temperatures with altitude and are common on nights with limited cloud cover and light to no wind. They begin to form as the sun sets and often continue into the morning. Their presence can be indicated by ground fog; however, if fog is not present, inversions can also be identified by the movement of smoke from a ground source or an aircraft smoke generator. Smoke that layers and moves laterally in a concentrated cloud (under low wind conditions) indicates an inversion, while smoke that moves upward and rapidly dissipates indicates good vertical air mixing.

**SENSITIVE AREAS**

The pesticide should only be applied when the potential for drift to adjacent sensitive areas (e.g. residential areas, bodies of water, known habitat for threatened or endangered species, non-target crops) is minimal (e.g. when wind is blowing away from the sensitive areas).

**USE PRECAUTIONS**

Do not apply Tenkoz Ethephon 6 PGR through any type of irrigation system.

Avoid spray drift to nearby crops as this product will cause modifications in plant growth. Plant injury or reduced yields will result.

Mix only the amount of spray you expect to use each day. Do not allow mixed solution to stand overnight.

**DIRECTIONS FOR USE**

**It is a violation of Federal law to use this product in a manner inconsistent with its labeling.**

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulations. Read entire label before using this product.

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## AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. This standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE), notification to workers and restricted-entry intervals. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted-entry interval (REI) of 48 hours. The REI is 72 hours in areas where average rainfall is less than 25 inches per year.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated such as plants, soil or water is coveralls over long-sleeved shirt and long pants, chemical resistant gloves made of any waterproof material, such as nitrile, butyl, neoprene, or barrier laminate, chemical resistant footwear plus socks, and protective eyewear. For overhead exposure, chemical-resistant headgear is also required.

Notify workers of the application by warning them orally and posting warning signs at entrances to treated areas.

## STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage or disposal.

### PESTICIDE STORAGE

Store in a cool, dry place and away from food, feed and other pesticides. **IF SPILLED:** If container is broken or contents have spilled, follow all precautions indicated above and clean up immediately. Before cleaning up, put on full length trousers, long sleeved shirt, protective gloves, and goggles or face shield. Soak up spill with absorbent media such as sand, earth or other suitable material and dispose of waste at an approved waste disposal facility.

### PESTICIDE DISPOSAL

Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

**CONTAINER HANDLING:** (See the Net Contents section on the container to determine if it is non-refillable or refillable.) APPROPRIATE BOX MUST BE CHECKED.

**Non-refillable containers (1 and 2.5 gallons):** Do not reuse or refill this container. Triple rinse or pressure rinse container (or equivalent) promptly after emptying.

**Triple rinse as follows:** Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times.

**Pressure rinse as follows:** Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 PSI for at least 30 seconds. Drain for 10 seconds after the flow begins to drip.

Offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

**Non-refillable containers (>5 gallons):** Do not reuse or refill this container. Triple rinse or pressure rinse container (or equivalent) promptly after emptying.

**Triple rinse as follows:** Empty the remaining contents into application equipment or a mix tank. Fill the container ¼ full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times.

**Pressure rinse as follows:** Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect



**EQUIPMENT CLEANING**

Because of the acidic nature of this product, prolonged exposure to spray deposit will damage acrylic plastics, certain paints, and metals.

Rinse thoroughly with a detergent and water all exposed acrylic plastic-type materials (e.g., aircraft windshields), and painted surfaces **within an hour** after exposure to spray deposits.

**At the end of each day**, rinse thoroughly with a detergent and water all the metal parts of the aircraft and the associated spray equipment exposed to the spray deposits.

**COTTON**

| USE  | EXPECTED CONDITIONS   | ETHEPHON 6 PGR RATE |          | ONE GALLON ETHEPHON 6 PGR TREATS | MINIMUM SPRAY VOLUMES (Gals/A)* |        | APPLICATION TIMING   |
|--|---|---------------------|----------|----------------------------------|---------------------------------|--------|--|
|  |   | Pints/A             | LBS A.I. |                                  | Acres                           | Ground |  |
| <b>Ethephon 6 PGR Boll Opener**</b>                  | Hot and dry 80°F or higher  | 1 1/3               | 1.0      | 6                                |                                 |        | Apply when the number of mature unopened bolls is sufficient to produce the desired crop. See below for test of boll maturity. Treatment uniformly opens bolls 7 to 14 days earlier. |
|  | Dry and 75 to 80°F  | 2                   | 1.5      | 4                                | 10                              | 2      |  |
|  | Cool but above 65°F<br>or<br>Rank cotton                              | 2 2/3               | 2.0      | 3                                |                                 |        |  |
| <b>Ethephon 6 PGR + FOLEX® Defoliant Tank Mix***</b> | High soil moisture<br>or<br>High fertility level<br>or<br>Rank cotton | 1/3                 | 0.25     | 24                               | 10                              | 5      | Apply 4 to 7 days prior to Ethephon 6 PGR boll opening application. To be used as a sequential treatment with, not in place of Ethephon 6 PGR boll opening treatment.                |
| <b>Ethephon 6 PGR + Dropp Defoliant Tank Mix***</b>  | High soil moisture<br>or<br>High fertility level<br>or<br>Rank cotton | 1/3                 | 0.25     | 24                               | 10                              | 3      | Apply 4 to 7 days prior to Ethephon 6 PGR boll opening application. To be used as a sequential treatment with, not in place of Ethephon 6 PGR boll opening treatment.                |
| <b>Pre-Conditioner for Defoliation</b>               | Hot, dry, above 80°F  | 2/3                 | 0.5      | 12                               |                                 |        | Apply 4 to 7 days prior to defoliant. Enhances top crop defoliation reducing deterioration of bottom crop and allows for earlier harvest.  |
|  | Cool, above 65°F<br>or<br>Rank cotton                                 | 1 1/3               | 1.0      | 6                                | 10                              | 2      |  |

\* For best performance, by ground or air application, choose equipment and spray volumes that will insure uniform coverage of foliage and bolls.

\*\* **Pretreatment With Defoliants Prior to Ethephon 6 PGR Boll Opening Treatment:** If the cotton is overly rank or laying down in the middles and good spray coverage of the bolls with Ethephon 6 PGR is difficult, a pretreatment with defoliants will be useful to improve boll coverage with Ethephon 6 PGR. Use dosage rates of Ethephon 6 PGR recommended for boll opening. Read and observe all appropriate label use directions and precautions for the defoliant used.

\*\*\* Can use up to full label rate for each product.

\*\*\*\* In California and Arizona use a volume of no less than 5 gallons per acre for aerial applications.

**Boll Maturity**

A boll is mature when it is too hard to be dented when squeezed between thumb and fingers, too hard to be sliced with a sharp knife, and when the seed coat becomes light brown in color.

**Use Limitations**

- Do not exceed a maximum of 2.0 lb. ethephon active ingredient per acre per year through combined or repeated uses of any ethephon products.
- Boll Opening: Do not tank mix Ethephon 6 PGR with a desiccant if the cotton is to be spindle harvested.
- Pre-Condition for Defoliation: Do not tank mix Ethephon 6 PGR with desiccants unless plant desiccation is required. Do not use a defoliant before there is sufficient mature unopened bolls to produce the desired yield (see **Use Information** section on how to test for boll maturity).
- DO NOT APPLY Ethephon 6 PGR IF RAIN IS EXPECTED WITHIN 6 HOURS. Rainfall within 6 hours of application may reduce product performance.
- Do not plant another crop within 30 days after treatment. Small grains planted earlier than 1 month or intercropped with the cotton crop to which Ethephon 6 PGR will be applied may only be used as cover crops and may not be harvested for food or feed. Ethephon 6 PGR may cause yellowing and growth inhibition of treated small grains.

**WHEN TO HARVEST COTTON**

Do not harvest cotton sooner than 7 days after a treatment with Ethephon 6 PGR.

Observe the treated crop and harvest when optimum boll opening has been reached. Too early harvest might reduce the full advantage of the treatment and too late a harvest may result in reduced quality and loss of lint which will drop from the plant.

**TOBACCO  
(Flue-Cured Only)**

| Crop Situation             | Ethephon 6 PGR Pints/Acre | Minimum Spray Volumes Gallons/Acre | Specific Directions   |
|----------------------------|---------------------------|------------------------------------|---|
| Directed Spray Application | 1 1/3                     | 50                                 | Use drop nozzles. Choose TG or OC spray tips designed to apply 50 - 60 gpa at 35-40 psi and at tractor speed of 2-3 mph. Use 2 nozzles per row; one on each side of the row dropped low enough to direct the spray to the leaves to be ripened and harvested. Thorough spray coverage is essential. With a directed spray, be sure to harvest all leaves with 20% or more yellowing.  |
| Over-The-Top Application   | 1 1/3 – 2 2/3             | 40                                 | Treat only when leaves remaining on the stalk are mature. To ensure remaining leaves are mature, test spray several tobacco plants as described under the section " <b>Application Timing</b> ". Use the lower rate in a normally mature crop when experience indicates that minimum ripening inducement is required. Use the higher rate when the crop is heavy and has a tendency to be more rank or when temperatures are lower than normal. Always test spray to determine if the tobacco is mature enough to respond to treatment with Ethephon 6 PGR.<br><br>Apply over-the-top Ethephon 6 PGR spray as a fine mist using three nozzles (one nozzle tip over the center of the plant, and one on each side) so all leaves are covered thoroughly, similar to the application pattern of systemic sucker control agents. Use a spray pressure of 40 to 60 psi. |

**USE LIMITATIONS**

- Do not apply Ethephon 6 PGR to immature leaves as this can result in unsatisfactory coloring, weight loss and reduced leaf quality.
- Do not allow the crop to over ripen in the field after using Ethephon 6 PGR, since this may cause some reduction in yield and quality.
- Do not treat before anticipated major storm which could prevent harvest and result in crop loss.
- DO NOT APPLY Ethephon 6 PGR IF RAIN IS EXPECTED WITHIN 6 HOURS. Rainfall within 6 hours of application may reduce product performance.
- Do not use Ethephon 6 PGR with additives other than recommended on this label.
- Do not plant another crop within 30 days after treatment.
- Do not exceed a maximum of 2 lbs ethephon active ingredient per acre per year through repeated uses of any ethephon products.

